



Nanticoke/Wicomico River Basin

Current Status of Wadeable Streams

Land Use in the Basin

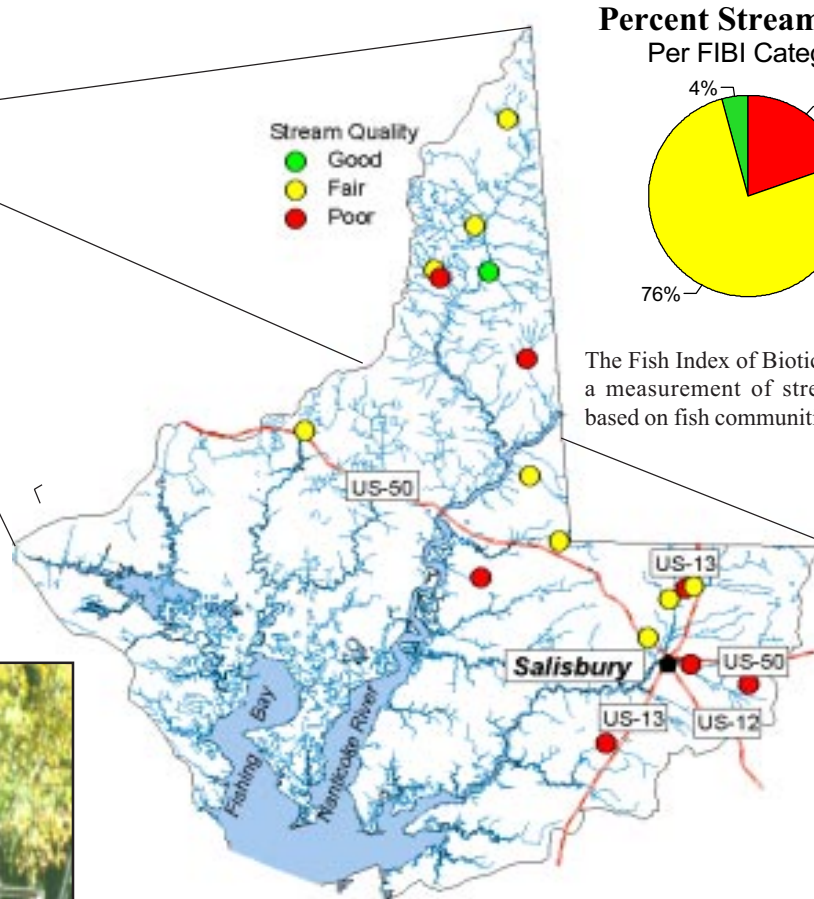


Where is the Nanticoke/Wicomico River Basin?

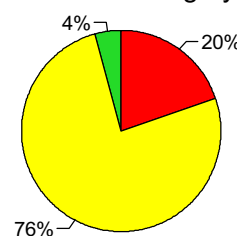
The Nanticoke/Wicomico basin is located within Dorchester, Wicomico, and Somerset counties in Maryland and also extends into Delaware. The Nanticoke, Wicomico, and Transquaking Rivers, as well as Fishing Bay, Monie Bay, and Marshyhope Creek, are all part of the network of streams that make up the basin.



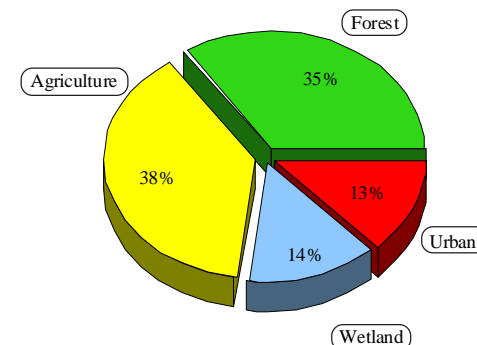
While the region was one of the first to be inhabited by Europeans, the lower portion of the Nanticoke/Wicomico basin remains one of the least developed areas in Maryland.



Percent Stream Miles Per FIBI Category



The Fish Index of Biotic Integrity is a measurement of stream quality based on fish communities.



Land uses in the Nanticoke/ Wicomico River basin are primarily agricultural and rural. Agriculture and related activities, such as packaging plants, are of economically important in the basin. The basin covers an area of 877 square miles with a population density of 100 people per square mile.



What Lives in Our Streams? *

Estimated Fish Abundance:	1.1 million
Number of Fish Species:	28
Number of Gamefish Species:	2
Number of Reptile and Amphibian Species:	9
Number of Freshwater Mussel Species:	1

*Based on collections of the Maryland Biological Stream Survey in wadeable streams basin-wide during 1995.

Water Quality



Oxygen - 16% of the streams had oxygen levels below the state water quality standard of 5 mg/L.



Nitrate - 92% of the streams had nitrate levels (>1 mg/L) that may affect aquatic life. The main sources of nitrates in small streams are fertilizers and acid rain.



Buffering Capacity - 8% of the streams are poorly buffered against acid rain.

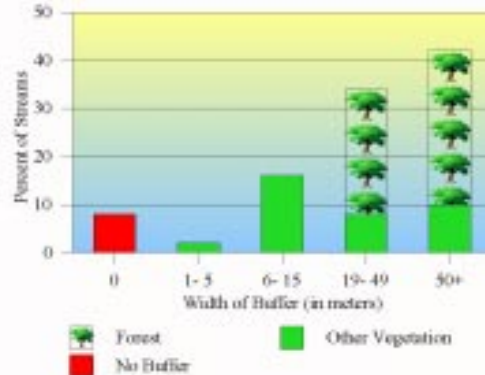
Good

Fair

Poor

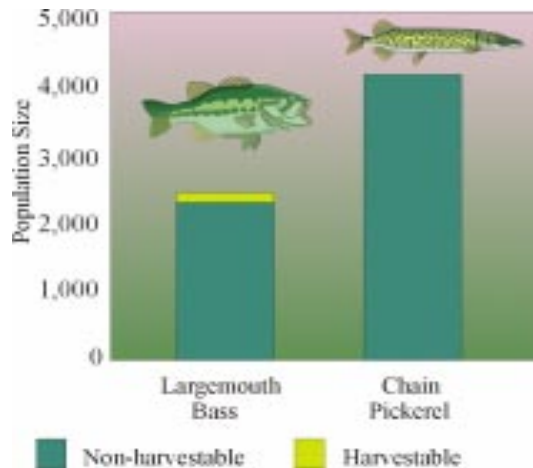
Riparian Zone


Trees, shrubs, and grasses that border a stream are called the stream's *riparian buffer*. This buffer zone can protect a stream against runoff, provides shade, stabilizes stream banks, and supplies food and shelter for aquatic life. A wide and intact buffer offers more protection than a narrow one. The riparian buffers in the Nanticoke/Wicomico basin are generally in good condition. We can help maintain these buffers by protecting streamside forests and planting trees in disturbed areas.




Gamefish

Two gamefish species were found in the basin, but most fish were smaller than the legal size limit. Wadeable tributary streams in the Nanticoke/ Wicomico appear to serve as a nursery for gamefish.

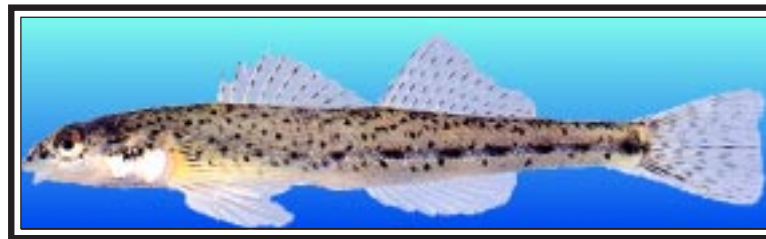




Did You Know???



- Of the major river basins in Maryland, the Nanticoke/Wicomico has among the highest percentage of wetlands.
- The basin is among the lowest in elevation of Maryland's major river basins, with most of the basin less than 60 feet above sea level. The low elevation leads to frequent flooding.
- We may be losing an irreplaceable part of our natural heritage. At present there are two fish species in the basin that are at risk of local extinction: the glassy darter and the mud sunfish.



The glassy darter, an endangered species, is found in the Nanticoke/Wicomico River Basin.

Community Involvement

Want to help? These community groups can show you how!

Alliance for the Chesapeake Bay
6600 York Road, Suite 100
Baltimore, MD 21212
Kathleen Millan (410) 377-6270

Lower Eastern Shore Tributary Team
Tawes State Office Building, C-2
Annapolis, MD 21401
Christina Mills (410) 260-8710

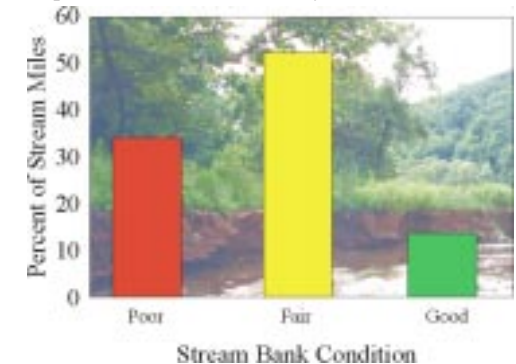
Friends of the Nanticoke River
P.O. Box 15
Nanticoke, MD 21840-0015
Judith Stribling (410) 543-6431

Wicomico Environmental Trust
Dr. Harry Womack (410) 543-6492



Stream Bank Stability

Eroded, unstable banks reduce habitat quality in streams and contribute to water quality problems in downstream areas. On average, the stability of stream banks in the basin is fair to poor. As some of the lands within the basin were developed for agriculture, and later urbanized, some stream banks became highly eroded. Since the streams in this basin flow into the Chesapeake, this bank instability causes an increase in downstream transport of nutrients and suspended sediments to the Bay.



Recreation

There are many places to enjoy recreational activities in the basin, such as the Blackwater National Wildlife Refuge and five state wildlife management areas. Popular activities include fishing, hunting, trapping, picnicking, camping, swimming, hiking, boating, and nature observation.



A popular summer swimming spot, Johnson's Pond, is located near Salisbury, in Wicomico County.

For more detailed information on streams in the Nanticoke/Wicomico basin and elsewhere in Maryland contact Ann Smith of DNR/MANTA at (410) 260-8610 or email asmith@dnr.state.md.us, or check out the DNR web site at www.dnr.state.md.us/Bays/waterqual/mbss/mbss.html.